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| 10/727,446 | 12/03/2003 | Barrington Herman | WEYE121341/24873 | 7090 |

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WEYERHAEUSER COMPANY
INTELLECTUAL PROPERTY DEPT., CH 1J27
P.O. BOX 9777
FEDERAL WAY, WA 98063

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| EXAMINER |
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GELLNER, JEFFREY L

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GROUP 3600

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/727,446
Filing Date: December 03, 2003
Appellant(s): HERMAN, BARRINGTON

Tineka J. Quinton
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 22 December 2006 appealing from the Office action mailed 6 February 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Radwan et al. "Softwood cuttings for propagation of red alder" New Forests vol. 3 (1989) pages 21-30.

Saul et al. "Vegetation Propagation of Alder (*Alnus glutinosa* L.) by Rooted Cuttings" Forest Research Notes 33 (1982) pages 1-3.

Huss-Danell et al. "Conditions for rooting of leafy cuttings of *Alnus incana*" Physiol. Plant. vol. 49 (1980) pages 113-116.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 and 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Radwan et al. (New Forests vol. 3; document 21 on Applicant's IDS received 7 May 2004) in view of Saul et al. (document O25 on page 3 of Applicant's 1449 received 7 May 2004).

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As to Claims 1 and 13, Radwan et al. disclose a method for promoting growth of shoots (“vigorous new shoots” of top page 23) comprising applying fertilizer solution (“intermittent overhead mist” of 2nd para. of page 24) that comprises less than about 0.01% (w/v) nitrogen (in that mist is water which would contain less than about 0.01% (w/v) nitrogen) from an Alder. Not disclosed is the use of an alder log. Saul et al., however, discloses the use of a log (“cuttings” of Saul et al.) as a source for propagation. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Radwan et al. by using a log as disclosed by Saul et al. so as to have a practical way of propagating cuttings of alder with both shoots and roots so as to increase the developmental speed of improved genotypes (see Saul et al.).

As to claim 2, Radwan et al. as modified by Saul et al. further disclose the solution not containing any nitrogen (in that the water used for misting plants contains not nitrogen unless contaminated of Radwan et al.).

As to claims 3 and 5, Radwan et al. as modified by Saul et al. further disclose the solution an intermittent mist (from page 24, 2nd para. of Radwan et al.).

As to claim 4, the limitations of Claim 1 are disclosed as described above. Not disclosed is the mist applied continuously. Examiner takes official notice that it is old and notoriously well known in the horticultural art to apply a mist continuously to seedlings. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Radwan et al. by misting continuously depending upon the physiologic needs of the seedlings.

As to claim 6, the limitations of Claim 3 are disclosed as described above. Not disclosed is the mist applied at 65 psi. It would have been obvious to one of ordinary skill in the art at the

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time of the invention to modify the method of Radwan et al. by misting at 65 psi so as to supply the pressure needed to adequately mist the seedlings.

As to claims 10-12, Radwan et al. as modified by Saul et al. further disclose harvesting shoots from the log (top of page 23 of Radwan et al.), planting harvested shoots in a rooting medium (“vermiculite and perlite” of page 24, 2nd para. of Radwan et al.) in the presence of a rooting hormone (see “*The chemical treatments*” starting on page 23 of Radwan et al.), and applying a fertilizer solution (“intermittent overhead mist” of 2nd para. of page 24 of Radwan et al.) that comprises less than about 0.01% (w/v) nitrogen (in that mist is water which would contain less than about 0.01% (w/v) nitrogen), to the planted shoots in an amount effective to promote growth of the shoots (see abstract of Radwan).

As to claim 14, Radwan et al. as modified by Saul et al. further disclose the Alder log being from a tree 5 to 9 years old (“younger trees (<7 years)” of page 22, last para. of Radwan et al.).

As to claims 15 and 16, the limitations of Claim 1 are disclosed as described above. Not disclosed is the method used with Beech or Birch logs. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the method of Radwan et al. as modified by Saul et al. by substituting Beech or Birch for Alder depending upon the species that is to be improved.

Claims 7-9 are rejected under 35 U.S.C. §103(a) as being unpatentable over Radwan et al. (New Forests vol. 3; document 21 on Applicant’s IDS received 7 May 2004) in view of Saul et al.

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(document O25 on page 3 of Applicant's 1449 received 7 May 2004) in further view of Huss-Danell (Physiol. Plant; document 10 on Applicant's IDS received 7 May 2004).

As to claims 7-9, the limitations of Claim 1 are disclosed as described above. Not disclosed is the fertilizer solution comprising K, P, and Cu. Huss-Danell, however, discloses a rooting fertilizer for alder with K, P, and Cu (page 114, 1st para.). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the method of Radwan et al. as modified by Saul et al. by using the fertilizer solution of Huss-Danell so that the shoots have adequate nutrition to ensure healthy growth.

(10) Response to Argument

First Ground of Rejection - Claims 1-6 and 10-16

Examiner considers there to be a *prima facie* case obviousness because: (1) motivation to combine references is explicitly given by Saul et al. at the top of page 1 where it is stated that “[c]loning of alder selections and hydribds would be advantageous for the fast development of genetically improved varieties;” (2) there is expectation of success in the combinations because all the references deal with tissue culture of woody species; and (3) all limitations of the claims are disclosed in the references as shown in the rejections presented above.

The Cited References Fail to Teach or Suggest Propagation of Shoots From a Log

Radwan et al. discloses that “[c]uttings were made from the shoots were 10-12 cm long and 2-4 mm in diameter” at page 23, line 7. Although, Radwan et al. calls these samples “cutting” they are considered logs because they will produce new shoots as they grow (this from the fact that the cuttings produce new plants, see for example Fig. 2 of page 26). This is the

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definition of log that Applicant claims in claim 1, lines 4-5. Radwan et al.'s log however does not meet the length and diameter requirements of a log as defined by Applicant. Saul et al., however, discloses those requirements at page 1. There is expectation of success because both references deal with tissue culture in Alder.

The Cited References Fail to Teach or Suggest the Application of a Fertilizer Solution Containing Less Than 0.01% Nitrogen (w/v) to a Log

Radwan et al. states that the logs (cuttings) are subjected to an "overhead mist" at page 24. This is considered to be a mist of water. Water is a very, very weak fertilizer and meets Applicant's claim language of less than 0.01% (w/v) nitrogen because tap water does not contain nitrogen. Radwan et al. does not teach away from the instant invention because the fertilizer mentioned by Radwan et al. and cited by Applicant at the bottom of page 13 of the appeal brief is supplied to the trees that produce the logs (see Radwan et al. at page 23, lines 1-2) and the logs.

Second Ground of Rejection - Claims 7-9

Huss-Danell discloses the use of P, K, and Cu fertilizer in tissue culture of Alder because of "Hoagland nutrient solution" at page 114, line 1. This reference teaches that it was known to one of ordinary skill that these nutrients as well as other nutrients can be supplied to plants in tissue culture.

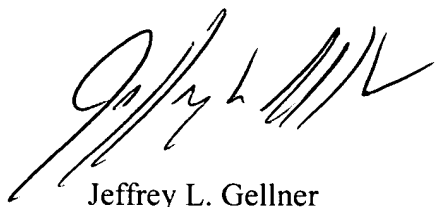
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(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Jeffrey L. Gellner', with a stylized, cursive script.

Jeffrey L. Gellner

Conferees:

Meredith Petravick

A small, handwritten signature in black ink, appearing to read 'MP'.

Kurt Rowan

A handwritten signature in black ink, appearing to read 'Kurt Rowan', with a stylized, cursive script.